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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,517	07/27/2006	Kentaro Nakahara	NEC 04P314	2231
27667	7590	09/07/2011	EXAMINER	
HAYES SOLOWAY P.C. 4640 E. Skyline Drive TUCSON, AZ 85718			HAN, KWANG S	
			ART UNIT	PAPER NUMBER
			1727	
			NOTIFICATION DATE	DELIVERY MODE
			09/07/2011	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

admin@hayes-soloway.com  
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<b>Office Action Summary</b>	<b>Application No.</b> 10/597,517	<b>Applicant(s)</b> NAKAHARA ET AL.	
	<b>Examiner</b> Kwang Han	<b>Art Unit</b> 1727	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 5) ☒ Claim(s) 1-6 is/are pending in the application.
- 5a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 6) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 7) ☒ Claim(s) 1-6 is/are rejected.
- 8) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 9) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

**ELECTRIC POWER STORAGE DEVICE EMPLOYING A POSITIVE ELECTRODE  
CONTAINING NITROXYL POLYMER**

Examiner: K. Han    SN: 10/597,517    Art Unit: 1727    August 30, 2011

***Continued Examination Under 37 CFR 1.114***

1.     A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 11, 2010 has been entered. Claim 1 was amended. Claim 6 was added.
2.     The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Claim Rejections - 35 USC § 112***

3.     The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4.     Claim 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, it is unclear and indefinite as to whether the "aluminum electrode" is an electrode as stated or is a part of the collector. For the purpose of examination it will be assumed the "aluminum electrode" is a part of the collector.

Claims dependant are also rejected for the same.

***Claim Rejections - 35 USC § 103***

5. The claim rejection under 35 U.S.C. 103(a) as unpatentable over Nakahara et al. in view of Farahmandi et al. on claims 1-5 is withdrawn, because of Applicants arguments and amendment to claim 1.

6. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakahara et al. (JP 2002-304996, machine translation) in view of Nanjundiah et al. (US 6627252).

Regarding claim 1, Nakahara is directed towards an electric storage device (power storage device) comprising a cathode with a nitroxyl polymer which has a nitroxyl cation partial structure and a nitroxyl radical partial structure [Abstract, 0008-0009]. Nakahara discloses the collector to be comprised of various materials including a carbon raw material and aluminum [0046] but is silent towards the carbon layer being formed and integrated on aluminum.

Nanjundiah teaches an electrode structure for a capacitor which is provided with a collector plate (108, 112) comprising aluminum foil with a primary coating of carbon powder film in contact with the collector plate (4:14-28) before applying the secondary electrode coating because this structure provides lower resistance (4:41-44; 6:55-63). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the collector of Nakahara to coated with a primary layer of carbon powder film

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on a aluminum foil layer because Nanjundiah teaches an electrode storage device provided with a collector having a primary layer of carbon powder provides for lower resistance in the final electrode structure.

Regarding claims 2 and 3, Nakahara disclose the whole active material to consist of a preferable range of 50% or more [0035] and to further include other constituents such as conductive polymers, carbon materials, etc. (electro-conductivity imparting agent) [0038].

Regarding claim 4, Nakahara discloses the cyclic nitroxyl structure [0010].

Regarding claim 5, Nakahara discloses the nitroxyl polymer compound having a side chain containing a residue which removes at least one hydrogen atom bonded to an element forming at least one cyclic nitroxyl structure [0017-0022].

Regarding claim 6, It is noted that this claim is a product-by-process claim. "Even though product-by-process are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F. 2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). The battery structure of Nakahara in view of Nanjundiah is similar to that of the Applicant's, Applicant's process of forming the conductive auxiliary layer on the aluminum electrode is not given patentable weight in the claims.

***Response to Arguments***

7. Applicant's arguments with respect to claims 1-6 have been considered but are moot in view of the new ground(s) of rejection.

***Contact/Correspondence Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kwang Han whose telephone number is (571) 270-5264. The examiner can normally be reached on Monday through Friday 8:00am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Barbara Gilliam can be reached on (571) 272-1330. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K. H./  
Examiner, Art Unit 1727

/Barbara L. Gilliam/  
Supervisory Patent Examiner, Art Unit 1727